

Objectives for Today

Participants will understand:

- what assistive technology is
- how assistive technology can support student engagement
- how to support a student in the selection and use of assistive technology

Universal Design for Learning



Learning Goals

- 1 I consider myself a beginner in implementing AT strategies and devices in the classroom.
- 2 I am beginning to understand how to implement AT strategies and devices in the classroom but need to know more.
- 3 I know and understand how to implement AT strategies and devices in the classroom but need more practice.
- 4 I am comfortable implementing AT strategies and devices in the classroom and could teach others how to do it.



"Communicative competence is about people. It is not about computer technology, or AAC systems. Technology is just THE tool, it is the people and the interactions between them that must be our main focus."

Janice Light

Assistive Technology

AT is “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities.”

(IDEA, 2004, Section 602)

Assistive Technology Services

- ...any service that directly assists a student with a disability in the selection, acquisition, or use of an assistive technology device.
- This includes: evaluating, purchasing, selecting, acquiring, training, designing, fitting, customizing, maintaining, repairing, etc.
- Who do you think does this?



“When you plant lettuce, if it does not grow well, you don’t blame the lettuce. You look for reasons it is not doing well. It may need fertilizer or more water or less sun. You never blame the lettuce.”

Thich Nhat Hanh,
Peace in Every Step

School Support Team



School Support Team

- STUDENT
- Teachers
- Family members
- Occupational Therapist
- Physical Therapist
- Behavior Therapist
- Speech Pathologist
- Teacher of Visually Impaired
- Teacher of Deaf/Hard Hearing
- Local Assistive Technology Specialist (LATS)
- School AT Contact
- Paraprofessionals
- School Administrators



Assistive Technology and Individuals with Disabilities Education Act (IDEA)



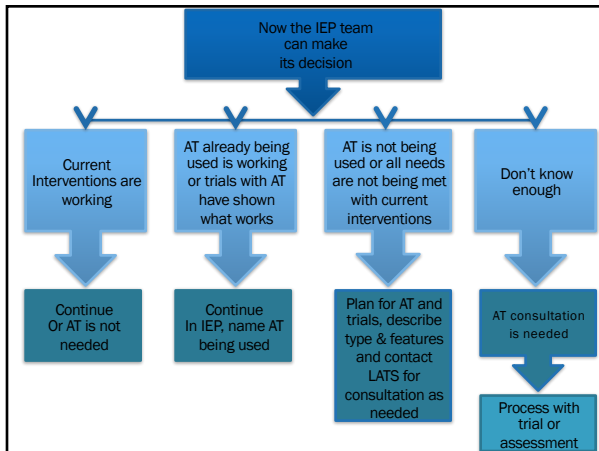
Requires that Assistive Technology (AT) must be considered as part of the IEP developed for each student that is eligible for Exceptional Student Education. (§300.308)

AT Consideration

Considering Assistive Technology (AT)

AT Consideration Questions...

- What is it we want the student to be able to do within the education program that the student is not able to do because of the disability?
- Is the student currently able to complete this task with special strategies or accommodations?
- Is there assistive technology currently being used to address this task?
- Would assistive technology help this student perform the task/skill more easily/efficiently or in the LRE or with less personal assistance?

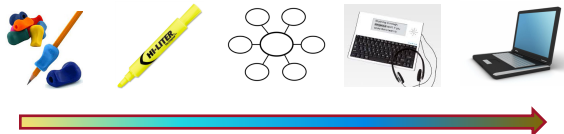


AT Policies & Procedures



Assistive Technology

AT is a continuum ranging from simple to complex. The school team should consider the least restrictive AT (simplest solution) before a complex solution.



Exploration Guide



Classroom Activities

Reading – PreK Level

Writing/Research – Upper Elementary

Math – Middle/High School

Planning Goal Setting – Elementary

Cooperative Learning – Middle/High School

Strategies for Materials Organization & Self-Regulation – All levels

AT Hands-on Exploration



- 6 stations – 7 minutes at each
- Exploration handout with “look-fors” and space to capture ideas
- Move sequentially through stations
1-2-3-4-5-6
- Try to interact with everything at the station
- Questions? Just ask!
- Share out with group



MS Science – Physical Science - Matter

Solid/Liquid/Gas

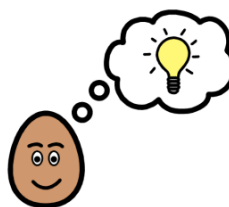
Sink or Float?



TechSpeak Overlay - Science Lesson



Any...



aha moments?
take aways?
questions?

Engagement

Academic

- **Curricular** - science activity offered opportunities to think & reason.

Psychological

- **Self-Awareness** – boosting self-confidence as an AAC user.



Social

- **Social Awareness** - perspective taking. (As AAC user)
- **Relationship Skills** – opportunities for interactive communication, cooperation, seeking and providing help.

Writing



Research Support

“A beginning writer is one who is learning to use written language to express communicative intent, and beginning writing is defined as starting with emergent writing (drawing, scribbling, and writing letters) and ending with conventional writing abilities, usually acquired by second or third grade for typically developing children.”

Sturm, Cali, Nelson, & Staskowski, 2012, p. 299



Developmental Writing Scale for Beginning Writers (Sturm, Cali, Nelson, & Staskowski, 2012)

Level	
1	Drawing only
2	Scribble writing which may include letter-like forms but with the majority of shapes not recognizable as letters
3	Some recognizable letters in strings but not grouped into words
4	Strings of letters grouped into “words” (i.e., with spaces between at least two groups of letters) but with no intelligible words
5	Strings of letters grouped into “words,” with only one possible real word (i.e., two or more letters in length) set apart, written repeatedly (e.g., dog, dog, dog), or embedded in a string of letters
6	Two to three different intelligible words embedded in strings, separated by spaces, or in a list format
7	More than three different intelligible words in a list format
8	More than three different intelligible words, with at least two of them in a partially formed sentence (i.e., grammatically related parts of a phrase, clause or sentence)

Developmental Writing Scale for Beginning Writers (Sturm, Cali, Nelson, & Staskowski, 2012)


Level	
9	One to two complete sentences with a subject phrase and a verb phrase
10	A minimum of three sentences, but with no coherent topic (i.e., most sentences are not related)
11	Organized writing with three or more sentences on a coherent topic but with limited cohesion between sentences (i.e., sentences can be reordered without changing meaning)
12	Organized writing with a coherent topic (i.e., on a consistent theme) and use of cohesive devices (e.g., pronoun or synonym replacement, logical connectors, subordinating conjunctions, conclusions that refer to prior content) across three or more sentences, so that sentences cannot be reordered without changing meaning
13	Organized writing with a coherent main topic and 2 cohesive subsections (sub-topics or story parts) with at least two sentences elaborating the meaning of each
14	Organized writing with a coherent main topic and at least 3 cohesive subsections (sub-topics or story parts) with at least two sentences elaborating the meaning of each

Copying/Tracing

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Writing


Writing



JOURNAL
If I were lost in the wilderness,

Journal Writing Prompt

If I Were Lost in the Wilderness...

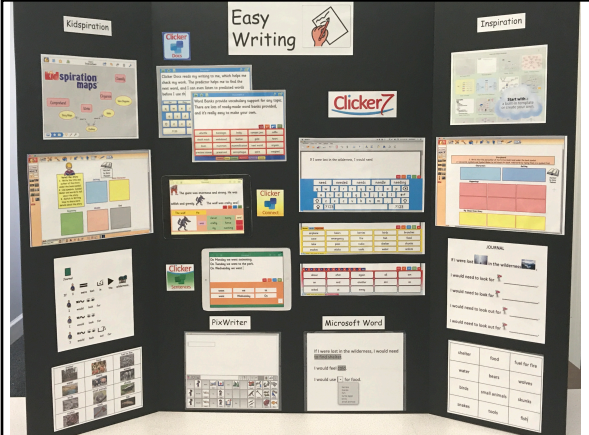


Activate Background Knowledge:

- Tarheel Reader Book – <http://tarheelreader.org/2013/05/23/about-hatchet-chapter-1/>
- To Build a Fire – <https://www.commonlit.org/texts/to-build-a-fire>
- Hatchet, Gary Paulsen, adapted for young readers by Kyle Rea – <https://www.youtube.com/watch?v=40D6cmW8c>
- Solo Survival: How to Survive Alone in the Wilderness for 1 Week-Eastern Woodlands – <https://www.youtube.com/watch?v=2cPdqgw7fi>

Brainstorm words about survival using picture cards


Easy Writing



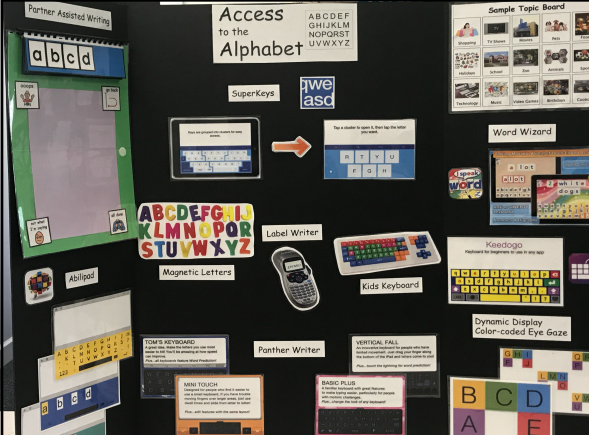
Easy Writing to Show Content Knowledge

For beginning or intermediate writers, curricular writing can be facilitated more effectively through:

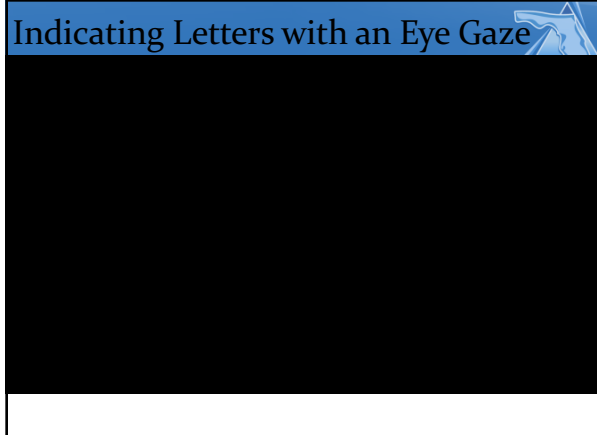
- Cloze sentence activities/writing frames
- Graphic organizers
- Topic boards/Answer choices
- Reordering words/sentences
- Providing symbol support
- Using picture or text word banks

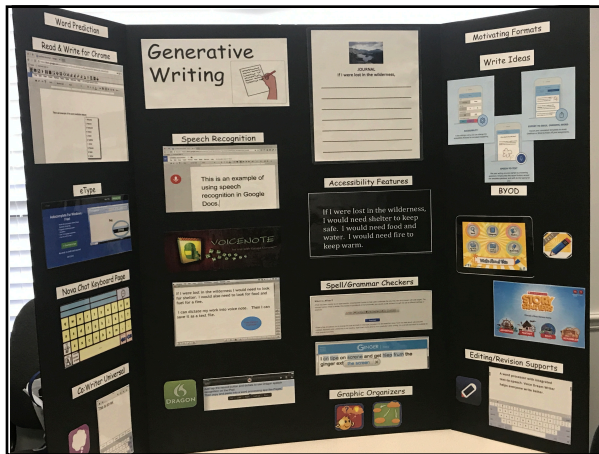


Access to the Alphabet



Indicating Letters with an Eye Gaze





Generative Writing

For more independent writers, provide support through:

- Access to word prediction
- Access to speech recognition
- Motivating formats
- Access to graphic organizers
- Access to spell and grammar checkers
- Access to editing and revision tools



Matching the Purpose

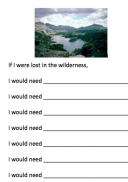
Easy Writing

- Demonstrate content knowledge



Alphabet Access

- Generate novel writing knowledge



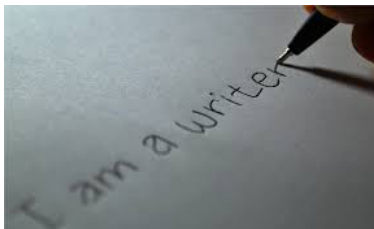
Let's Watch



REMEMBER:

"The essence of writing is communication."

Janet Sturm



ACTIVITY



Perceptions: Old vs. New

Engagement

Academic – “I can”

- Curricular - opportunities to think and reason
- Digital Literacy - use digital tools effectively
- Productivity - developing a quality written product

Psychological – “I want to”

- Self-Awareness - boosting self-confidence as an successful writer.
- Self Management - reduction in stress levels with proper tools to address student needs.



Social – “I belong”

- Social Awareness - perspective taking - students as writers.
- Relationship Skills – opportunities for interactive communication, cooperation, seeking and providing help.

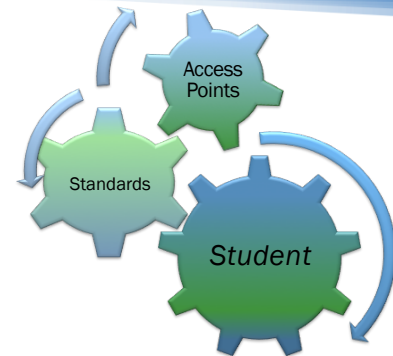
Self- Determination

- Promote choice making
- Encourage exploration of possibilities
- Promote reasonable risk taking
- Promote problem solving
- Promote self-advocacy
- Facilitate development of self-esteem
- Develop goal setting and planning
- Help youth understand their disability



DON'T LIMIT ME

Putting it together



Specialized Centers & Supports




ACCESS
Access to Florida Standards for Student Success

<https://at-udl.com/library/at-in-the-classroom-resources/>

The meaning of TEAM





Learning Goals



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4	I am comfortable implementing AT strategies and devices in the classroom and could teach others how to do it.

Q & A





Evaluation



Technology and Learning Connections

Thank you!

Developed by AT Work Group
Kathie Glus, Janet Good, Sheila Miguel, Josie Mongiovi, Teresa Pinder, Kathy Rose, Marcia Sterner, Elisa Wern



